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Docket No. 0225-4188

COMBINED DECLARATION AND POWER OF ATTORNEY FOR ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL, CONTINUATION OR CONTINUATION-IN-PART APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought or the invention entitled:

	the subject matter which is claimed and for which a patent is sought on ntion entitled: <u>EFFICIENT AND COMPACT SUBGROUP TRACE REPRESENTATION ("XTR")</u>
the spec	ification of which
	a. is attached hereto
	b. was filed on February 7, 2000 as application Serial No. 09/498,716 and was amended on (if applicable).
	PCT FILED APPLICATION ENTERING NATIONAL STAGE
	c. was described and claimed in International Application No filed on and as amended on (if any).
	state that I have reviewed and understand the contents of the above-identified specification, including the as amended by any amendment referred to above.
I acknov	wledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.
I hereby to be dir	specify the following as the correspondence address to which all communications about this application are rected:
	SEND CORRESPONDENCE TO:
	MORGAN & FINNEGAN, L.L.P.
	345 Park Avenue New York, N.Y. 10154
	DIRECT TELEPHONE CALLS TO: 202-857-8011
	I hereby claim foreign priority benefits under Title 35, United States Code § 119 (a)-(d) or under § 365(b) of any foreign application(s) for patent or inventor's certificate or under § 365(a) of any PCT international application(s) designating at least one country other than the U.S. listed below and also have identified below such foreign application(s) for patent or inventor's certificate or such PCT international application(s) filed by me on the same subject matter having a filing date within twelve (12) months before that of the application on which priority is claimed:

Country/PCT	Application Number	Date of filing (day, month, yr)	Date of issue (day, month, yr)	Priori Claim	•
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				Y	<u> </u>
I hereby claim the b	enefit under 35 U.S.C	. § 119(e) of any U.S	. provisional applicat	ion(s) list	ed belov
Provisional Appli	cation No.	Date of f	iling (day, month, yr)	!	
ADDITIONAL STATE	MENTS FOR DIVISI	ONAL CONTINUA	TION OF CONTINU	IATION:	INI DAD'
ADDITIONAL STATE	MENTS FOR DIVISI INTERNATIONAL A				IN-PAR'
OR PCT reby claim the benefit un	INTERNATIONAL And der Title 35, United S	APPLICATION(S DE tates Code § 120 of a	SIGNATING THE Users In the United States apple	J.S.)	
OR PCT reby claim the benefit un (c) of any PCT internatio	INTERNATIONAL Ander Title 35, United Sonal application(s) des	APPLICATION(S DE tates Code § 120 of a gnating the U.S. liste Date,	SIGNATING THE Users In the United States apple	J.S.) lication(s) ding, abar	or unde
OR PCT reby claim the benefit un (c) of any PCT internatio PCT Application Serial N	INTERNATIONAL Address that the state of the	APPLICATION(S DE tates Code § 120 of a ignating the U.S. liste Date,	esignating the United States appled below. Status (patented, pendus). Status application no. 2	J.S.) lication(s) ding, abarassigned (or unde
OR PCT reby claim the benefit unc) of any PCT internation	INTERNATIONAL Ander Title 35, United Sonal application(s) des	tates Code § 120 of a gnating the U.S. listed Date, Status (p	ny United States appled below. Status (patented, pen	J.S.) lication(s) ding, abar assigned (or unde _ ndoned)/ For PCT US//

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or Imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorneys and/or agents with full power of substitution and revocation, to prosecute this application, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith: John A. Diaz (Reg. No. 19,550), John C. Vassil (Reg. No. 19,098), Alfred P. Ewert (Reg. No. 19,887), David H. Pfeffer (Reg. No. 19,825), Harry C. Marcus (Reg. No. 22,390), Robert E. Paulson (Reg. No. 21,046), Stephen R. Smith (Reg. No. 22,615), Kurt E. Richter (Reg. No. 24,052), J. Robert Dailey (Reg. No. 27,434), Eugene Moroz (Reg. No. 25,237), John F. Sweeney (Reg. No. 27,471), Arnold I. Rady (Reg. No. 26,601), Christopher A. Hughes (Reg. No. 26,914), William S. Feiler (Reg. No. 26,728), Joseph A. Calvaruso (Reg. No. 28,287), James W. Gould (Reg. No. 28,859), Richard C. Komson (Reg. No. 27,913), Israel Blum (Reg. No. 26,710), Bartholomew Verdirame (Reg. No. 28,483), Maria C.H. Lin (reg. No. 29,323), Joseph A. DeGirolamo (Reg. No. 28,595), Michael P. Dougherty (Reg. No. 32,730), Seth J. Atlas (Reg. No. 32,454), Andrew M. Riddles (Reg. No. 31,657), Bruce D. DeRenzi (Reg. No. 33,676), Michael M. Murray (Reg. No. 32,537), Mark J. Abate. (Reg. No. 32,527), Alfred L. Haffner, Jr. (Reg. No. 18,919), Harold Haidt (Reg. No. 17,509), John T. Gallagher (Reg. No. 35,516), Steven F. Meyer (Reg. No. 35,613) and Kenneth H. Sonnenfeld (Reg. No. 35,179) of Morgan & Finnegan, L.L.P. whose address is: 345 Park Avenue, New York, New York, 10154; and Michael S. Marcus (Reg. No. 31,727) and John E. Hoel (Reg. No. 26,279) of Morgan & Finnegan, L.L.P., whose address is: 1775 Eye Street, Suite 400, Washington, D.C. 20006.

(Reg. No. 28,595), Michael P. Dougherty (Reg. No. 32,730), Seth J. Atlas (Reg. No. 32,454), Andrew M. Riddles (Reg. No. 31,657), Bruce D. DeRenzi (Reg. No. 33,676), Michael M. Murray (Reg. No. 32,537), Mark J. Abate. (Reg. No. 32,527), Alfred L. Haffner, Jr. (Reg. No. 18,919), Harold Haidt (Reg. No. 17,509), John T. Gallagher (Reg. No. 35,516), Steven F. Meyer (Reg. No. 35,613) and Kenneth H. Sonnenfeld (Reg. No. 33,285), Tony V. Pezzano (Reg. No. 38,271), Andrea L. Wayda (Reg. 43,979) and Walter G. Hanchuk (Reg. No. 35,179) of Morgan & Finnegan, L.L.P. whose address is: 345 Park Avenue, New York, New York, 10154; and Michael S. Marcus (Reg. No. 31,727) and John E. Hoel (Reg. No. 26,279) of Morgan & Finnegan, L.L.P., whose address is 1775 Eye Street, Suite 400, Washington, D.C. 20006.
I hereby authorize the U.S. attorneys and/or agents named hereinabove to accept and follow instructions from as to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and/or agents and me. In the event of a change in the person(s) from whom instructions may be taken I will so notify the U.S. attorneys and/or agents named hereinabove.
Full name of sole or first inventor Arjen K. Lenstra
Inventor's signature* April 11, 2000
Residence: c/o Citibank, N.A., 1 North Gate Rd, Mendham, NJ 07945-3104
Citizenship: United States
Post Office Address: c/o Citibank, N.A., 1 North Gate Rd, Mendham, NJ 07945-3104
Full name of second inventor Eric R. Verheul
Inventor's signature*
date Residence: Goudsbloemstraat 14, 5644 KE Eindhoven, The Netherlands
Citizenship: The Netherlands
Post Office Address: Goudsbloemstraat 14, 5644 KE Eindhoven, The Netherlands
ATTACHED IS ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR SIGNATURE BY THIRD AND SUBSEQUENT INVENTORS FORM.



Docket No. 0225-4188

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As a below named inventor, I hereby declare that:

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EFFICIENT AND COMPACT SUBGROUP TRACE REPRESENTATION ("XTR")

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	a. is attached hereto
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I hereby claims, a	state that I have reviewed and understand the contents of the above-identified specification, including the as amended by any amendment referred to above.
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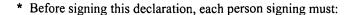
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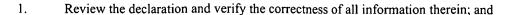
	The attached 35 U.S.C. § 119 claim for priority for the application(s) listed below forms a part of this declaration.						
	Country/PCT	Application Number	Date of filing (day, month, yr)	Date of issue (day, month, yr)	Prio Clai		
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	I hereby claim the be	enefit under 35 U.S.	C. § 119(e) of any U.S	. provisional applicat	ion(s) li	iste	d below.
	Provisional Applic	eation No.	Date of f	iling (day, month, yr)			
			•				
365(c)	OR PCT In or claim the benefit under of any PCT internation of Application Serial N	der Title 35, United and application(s) de	signating the U.S. liste	ny United States appled below. Status (patented, pend	ication(anc	doned)/
				U.S. application no. a	issigned	1 (1	
Applic	cation Serial No.	Filing Date,		atented, pending, aba U.S. application no. a			US/PCT for PCT)
	application is not dis manner provided by disclose material inf	sclosed in the above the first paragraph of formation as defined	insofar as the subject of listed prior United State of Title 35, United State in Title 37, Code of Focation(s) and the nation	tes or PCT internation tes Code, § 112, I ack ederal Regulations, §	nal appl nowled 1.56(a)	ica ge 1 wh	tion(s) in the the duty to nich occurred
inform willful Title 1	by declare that all state nation and belief are be I false statements and to 8 of the United States ation or any patent issu	lieved to be true; and he like so made are p Code and that such v	d further that these state ounishable by fine or I	ements were made w mprisonment, or both	ith the l	kno Sed	wledge that ction 1001 of

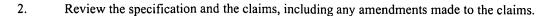
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& Finnegan, L.L.P. whose address is: 345 Park Avenue, New York, New York, 10154; and Michael S. Marcus (Reg. No. 31,727) and John E. Hoel (Reg. No. 26,279) of Morgan & Finnegan, L.L.P., whose address is 1775 Eye Street, Suite 400, Washington, D.C. 20006.	
I hereby authorize the U.S. attorneys and/or agents named hereinabove to accept and follow instructions from as to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and/or agents and me. In the event of a change in the person(s) from whom instructions may be taken I will so notify the U.S. attorneys and/or agents named hereinabove.	
Full name of sole or first inventor Arjen K. Lenstra	
Inventor's signature*	
date Residence: c/o Citibank, N.A., 1 North Gate Rd, Mendham, NJ 07945-3104	
Citizenship: United States	
Post Office Address: c/o Citibank, N.A., 1 North Gate Rd, Mendham, NJ 07945-3104	
Full name of second inventor Eric R. Verheul	
Inventor's signature* 26 MARCH 2000	
Residence: Goudsbloemstraat 14, 5644 KE Eindhoven, The Netherlands	
Citizenship: The Netherlands	
Post Office Address: Goudsbloemstraat 14, 5644 KE Eindhoven, The Netherlands	
ATTACHED IS ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR SIGNATURE BY THIRD AND SUBSEQUENT INVENTORS FORM.	







After the declaration is signed, the specification and claims are not to be altered.

To the inventor(s):

The following are cited in or pertinent to the declaration attached to the accompanying application:

Title 37, Code of Federal Regulation, §1.56

Duty to disclose information material to patentability

- (a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:
 - (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
 - (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

Title 35, U.S. Code § 101

Inventions patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Title 35 U.S. Code § 102

Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent,
- (b) the invention was patented or described in a printed publication in this or foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be patented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Title 35, U.S. Code § 103

Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Title 35, U.S. Code § 112 (in part)

Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Title 35, U.S. Code, § 119

Benefit of earlier filing date in foreign country; right of priority

An application for patent for an invention filed in this country by any person who has, or whose legal representatives or assigns have, previously regularly filed an application for a patent for the same invention in a foreign country which affords similar privileges in the case of applications filed in the United States or to citizens of the United States, shall have the same effect as the same application would have if filed in this country on the date on which the application for patent for the same invention was first filed in such foreign country, if the application in this country is filed within twelve months from the earliest date on which such foreign application was filed; but no patent shall be granted on any application for patent for an invention which had been patented or described in a printed publication in any country more than one year before the date of the actual filing of the application in this country, or which had been in public use or on sale in this country more than one year prior to such filing.

Title 35, U.S. Code, § 120

Benefit or earlier filing date in the United States

An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States, or as provided by section 363 of this title, which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application.

Please read carefully before signing the Declaration attached to the accompanying Application.

If you have any questions, please contact Morgan & Finnegan, L.L.P.